What is claimed:

1. A method of deprotecting a hydroxide or amine protected with a group of formula

$$ArC^*(R)H\text{-}(CH_2)_n\text{-}O\text{-}C(=O)\text{-}$$

, wherein R is H or independently the same as Ar, and n is 0 or 1-4, Ar refers to an aromatic or heteroaromatic ring with 5 to 6 ring atoms and one to two heteroatoms selected from O, N or S, which can be substituted with amino, alkanoyloxy, alkoxy, alkyl, alkylamino, allyl, carboxy, cycloalkyl, halo, haloalkyl, hydroxy, hydroxyalkyl or nitro, or up to one group which is (i) Ar^* which is independently the same as Ar except that it is not substituted with a further aryl, (ii) Ar^*-alkyl- or (iii) Ar^*O-, a ring atom of Ar adjacent to C^* can be substituted with $-CH_2-$, -O-, -NH-, $-S(O)_q-$ or $-P(O)_r-$, to form a bridge to a corresponding position on R when R is Ar, q is 0 or 1-2 and r is 0 or 1-2, the method comprising:

contacting the protected hydroxide or amine with an enzyme effective to remove the protecting group; and

recovering the amine.

2. The method of claim 1, wherein the protecting group is a phenylmethyloxycarbonyl group, which can be substituted.

3. The method of claim 1, wherein n is 0 when R is H.

4. The method of claim 1, wherein n is 1 where R is the same as Ar.

5. The method of claim 1, wherein the enzyme is obtained from *Sphingomonas paucimobilis*.

6. The method of claim 1, wherein the enzyme is obtained from *Sphingomonas paucimobilis* strain ATCC 202027.

7. The method of claim 1, wherein the protected compound is an amine which is alanine, valine, leucine, isoleucine, proline, 4-hydroxyproline, phenylalanine, tryptophan, methionine, glycine, serine, homoserine, threonine, cysteine, homocysteine, tyrosine, asparagine, glutamine, aspartic acid, glutamic acid, lysine, α-amino-ε-caprolactam (lysine lactam), ε-methyllysine, ornithine, arginine, histidine or 3-methyhistidine, or any of the foregoing substituted on an alkyl portion thereof with hydroxy or alkyl, on an amino with up to one alkyl, or on a phenyl moiety with alkyl, alkanoyloxy, alkoxy, amino, carboxy, cycloalkyl, halo, hydroxy, Ar^* or Ar^*O-, or a derivative of the foregoing forming a portion of a larger molecule via bonds formed by dehydration reactions with the amine or carboxylic acid moieties, or by carbon-nitrogen bonds formed at the amine moieties.

8. The method of claim 7, wherein the amine is α-amino-ε-caprolactam or α-amino-δ,δ-dimethyl-ε-caprolactam, or a derivative thereof.

9. A method of resolving a racemic mixture of a compound having a hydroxyl or amino moiety that is directly bonded to a chiral carbon, the method comprising:

providing a derivative of the compound in which the hydroxide or amine is protected with a group of formula ArC*(R)H-(CH2)n-O-C(=O)- , wherein R is H or independently the same as Ar, and n is 0 or 1-4, Ar refers to an aromatic or heteroaromatic ring with 5 to 6 ring atoms and one to two heteroatoms selected from O, N or S, which can be substituted with amino, alkanoyloxy, alkoxy, alkyl, alkylamino, allyl, carboxy, cycloalkyl, halo, haloalkyl, hydroxy, hydroxyalkyl or nitro, or up to one group which is (i) Ar* which is independently the same as Ar except that it is not substituted with a further aryl, (ii) Ar*-alkyl- or (iii) Ar*O-, a ring atom of Ar adjacent to C* can be substituted with -CH2-, -O-, -NH-, -S(O)q- or -P(O)r-, to form a bridge to a corresponding position on R when R is Ar, q is 0 or 1-2 and r is 0 or 1-2;

contacting the protected compound with an enzyme effective to remove the protecting group; and

isolating the compound or protected derivative thereof in a composition that is enantiomerically enriched in the desired enantiomer.

10. The method of claim 8, wherein the protecting group is a phenylmethyloxycarbonyl group, which can be substituted.

11. A method of isolating a bacteria producing an enzyme effective to remove a protecting group comprising:

growing prospective bacteria on a medium having a growth selective amount of an amine compound that is protected with a group of formula

$$ArC^{*}(R)H\text{-}(CH_2)_n\text{-}O\text{-}C(=O)\text{-}$$

, wherein R is H or independently the same as Ar, and n is 0 or 1-4, Ar refers to an aromatic or heteroaromatic ring with 5 to 6 ring atoms and one to two heteroatoms selected from O, N or S, which can be substituted with amino, alkanoyloxy, alkoxy, alkyl, alkylamino, allyl, carboxy, cycloalkyl, halo, haloalkyl, hydroxy, hydroxyalkyl or nitro, or up to one group which is (i) Ar* which is independently the same as Ar except that it is not substituted with a further aryl, (ii) Ar*-alkyl- or (iii) Ar*O-, a ring atom of Ar adjacent to C^{*} can be substituted with $-CH_2-$, -O-, -NH-, $-S(O)_q-$ or $-P(O)_r-$, to form a bridge to a corresponding position on R when R is Ar, q is 0 or 1-2 and r is 0 or 1-2; and

isolating bacteria that grow on said medium.

12. The method of claim 11, further comprising confirming the effectiveness of the enzyme by

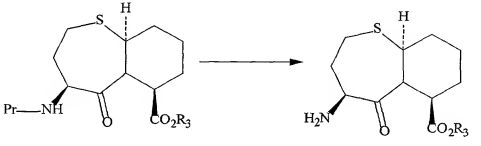
incubating the bacteria with an amine protected with the protecting group; and

monitoring conversion of the protected amine to the free amine.

13. The method of claim 11, wherein the carbamate protecting group is a phenylmethyloxycarbonyl group, which can be substituted.

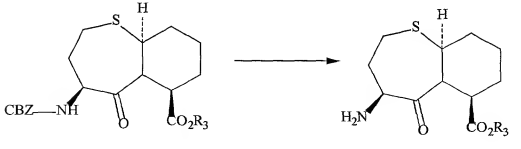
14. A collection of two or more bacterial isolates, the isolates isolated by the method of claim 11 using a different amine or a different protecting group.

15. The method of claim 1, wherein the contacting effectuates the following reaction:



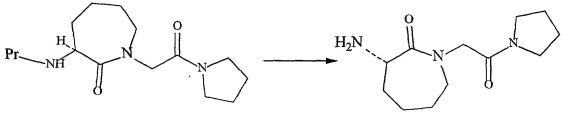
, wherein Pr- is $ArC^*(R)H\text{-}(CH_2)_n\text{-}O\text{-}C(=O)\text{-}$.

16. The method of claim 15, wherein the reaction is:



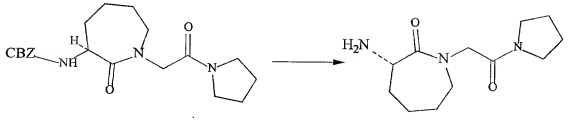
, wherein CBZ- is N-carbobenzyloxy.

17. The method of claim 1, wherein the contacting effectuates the following reaction:



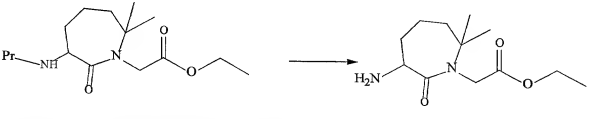
, wherein Pr- is $ArC^*(R)H-(CH_2)_n-O-C(=O)-$.

18. The method of claim 17, wherein the reaction is:



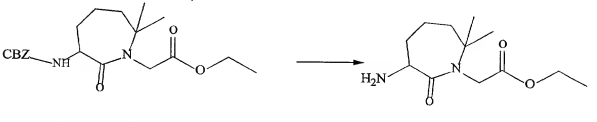
, wherein CBZ- is N-carbobenzyloxy.

19. The method of claim 1, wherein the contacting effectuates the following reaction:



, wherein Pr- is $ArC^*(R)H-(CH_2)_n-O-C(=O)-$.

20. The method of claim 19, wherein the reaction is:



, wherein CBZ- is N-carbobenzyloxy.